

# इंटरनेट

# मानक

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IS 10068-3 (1990): Press Working Die Sets - Plain Type,  
Part 3: Centre Post Round Die Sets [PGD 4: Metal Forming  
Machines]



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*Indian Standard*

**PRESS WORKING DIE SETS — PLAIN  
TYPE — SPECIFICATION**

**PART 3 CENTRE POST ROUND DIE SETS**

UDC 621·979·073

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**BUREAU OF INDIAN STANDARDS**  
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NEW DELHI 110002

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**Price Group 2**

## FOREWORD

This Indian Standard ( Part 3 ) was adopted by the Bureau of Indian Standards on 2 February 1990, after the draft finalized by the Metal Forming Machines Sectional Committee had been approved by the Production Engineering Division Council.

This Indian Standard has been prepared based on practices followed in Indian Industries.

This Indian Standard is published in three parts. Other parts are as follows:

IS 10068 ( Part 1 ) : 1982 Centre post rectangular die sets

IS 10068 ( Part 2 ) : 1982 Centre post square die sets

## Indian Standard

# PRESS WORKING DIE SETS — PLAIN TYPE — SPECIFICATION

### PART 3 CENTRE POST ROUND DIE SETS

#### 1 SCOPE

**1.1** This standard (Part 3) covers dimensions and other requirements for plain type round die sets with two guide posts in the central axis.

#### 2 REFERENCES

**2.1** The following Indian Standards are necessary adjuncts to this standard:

IS No.	Title
210 : 1978	Grey iron casting ( <i>third revision</i> )
226 : 1975	Structural steel (standard quality) ( <i>fifth revision</i> )
1030 : 1982	Carbon steel castings for general engineering purposes ( <i>fourth revision</i> )
2102 (Part 1) : 1980	General tolerances for dimensions and form and position: Part 1 General tolerances for linear and angular dimension ( <i>second revision</i> )
2500 (Part 1) : 1973	Sampling inspection tables: Part 1 Inspection by attributes and by count of defect ( <i>first revision</i> )
7664 : 1979	Guide posts for press tool sets ( <i>first revision</i> )
8127 : 1979	Guide bushes for press tool sets ( <i>first revision</i> )
11742 : 1986	Test chart for die sets

#### 3 TYPES

*Type A* — Without tapped hole for shank

*Type B* — With tapped hole for shank

#### 4 DIMENSIONS

**4.1** Dimensions shall be as given in Table 1 read with Fig. 1.

#### 5 DESIGNATION

**5.1** A centre post round die set Type A of cast iron having a die space  $d_1$  80 mm with guide posts. Type A with round end and length

$l = 160$  mm and with stepped solid (Type A) guide bushes of length  $l = 50$  mm shall be designated as:

Die Set AC-80 IS 10068 (Part 3)  
alongwith Guide Posts AR-19/20  $\times$  160 IS 7664  
and Guide Bushes A 19/20  $\times$  50 IS 8127

**5.2** A centre post round die set Type B of mild steel having a die space  $d_1 = 80$  mm with guide posts Type B with tapered end and length  $l = 160$  mm and with guide bushes Type C shall be designated as:

Die Set BMS-80 IS 10068 (Part 3)  
alongwith Guide Posts BT 19/20  $\times$  160 IS 7664  
and Guide Bushes C-19/20 IS 8127

**5.3** A centre post round die set Type B of cast steel having a die space  $d_1 = 80$  mm with guide posts Type A with tapered end and length  $l = 160$  mm and with guide bushes Type B of length  $l = 50$  mm shall be designated as:

Die Set BS-80 IS 10068 (Part 3)  
alongwith Guide Posts AT 19/20  $\times$  160 IS 7664  
and Guide Bushes B 19/20  $\times$  50 IS 8127

#### 6 MATERIAL

**6.1** The top and bottom tool holders shall be made of mild steel of IS 226 : 1975 or of cast iron of grade FG 260 of IS 210 : 1978 or of cast steel of grade 23-45 of IS 1030 : 1982.

#### 7 GENERAL REQUIREMENTS

**7.1** The top and bottom tool holders shall be free from cracks, burrs and bits and shall satisfy for accuracy when tested in accordance with IS 11742 : 1986.

#### 8 SAMPLING

##### 8.1 Lot

All the dies sets of the same designation manufactured from the same material under similar conditions of production shall be grouped together to constitute a lot.

**8.2** For ascertaining the conformity of the lot, the procedure for sampling and inspection as given in IS 2500 (Part 1) : 1973 shall be followed. The type of sampling plan, inspection level and acceptable quality level (AQL)

to be followed for various characteristics shall be as given in 8.3. IS 2500 (Part 1) : 1973 shall be followed.

9 MARKING

8.3 For dimensions, designation, general requirements, and marking, a single sampling plan with Inspection Level IV and AQL of 2.5 percent as given in Tables 1 and 2 of 9.1 The designation and indication of the source of manufacture shall appear at a prominent place on tool holders.

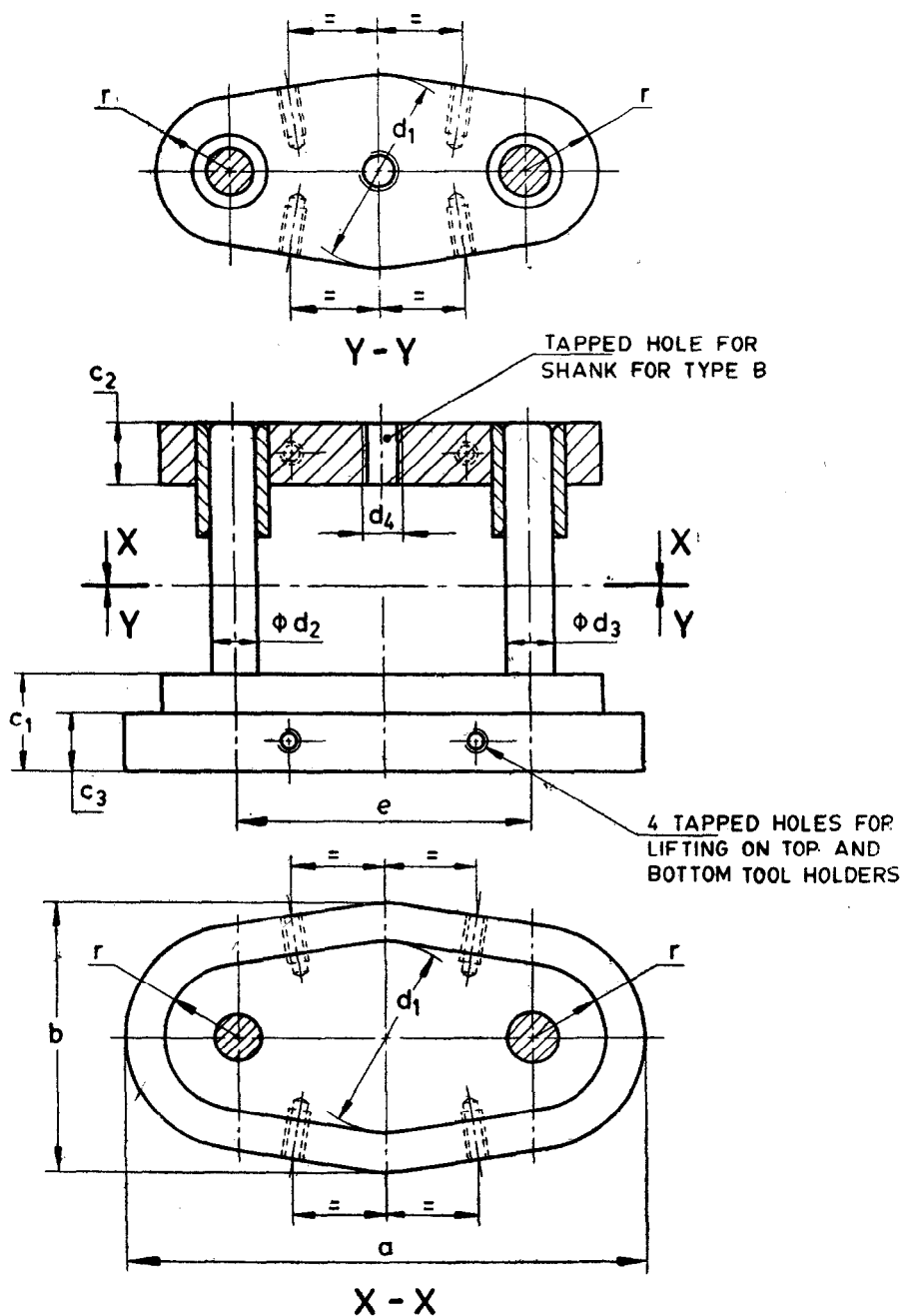


FIG. 1 DIMENSIONS FOR CENTRE POST ROUND DIE SET

**Table 1 Dimensions for Centre Post Round Die Sets**

( Clause 4 and Fig. 1 )

All dimensions in millimetres.

Die Space $d_1$	$a$	$b$	$C_1$	$C_2$	$C_3$	$d_2$	$d_3$	$d_4$	$e$	$r$ Min
50	182	90	40	25	20	15	16	M16 $\times$ 1.5	86	28
63	192	103	40	25	20	15	16	M16 $\times$ 1.5	100	28
80	238	120	50	30	30	19	20	M20 $\times$ 1.5	128	35
100	269	140	50	32	30	24	25	M20 $\times$ 1.5	153	38
125	294	165	50	32	30	24	25	M20 $\times$ 1.5	178	38
160	347	200	56	40	30	30	32	M24 $\times$ 1.5	221	43
200	387	240	56	40	30	30	32	M24 $\times$ 1.5	261	43
250	471	300	56	50	30	38	40	M30 $\times$ 2	321	50
315	536	365	63	50	30	38	40	M30 $\times$ 2	386	50
350	581	410	63	60	30	38	40	M30 $\times$ 2	421	50
400	631	460	63	60	30	38	40	M42 $\times$ 3	471	50
450	705	510	75	60	30	48	50	M42 $\times$ 3	531	57
500	755	560	75	60	30	48	50	M42 $\times$ 3	581	57

## NOTES

1 Tapped holes for lifting — M10  $\times$  25 for die sets up to  $\phi$  250 die space, and M16  $\times$  40 for die sets  $\phi$  315 and above.

2 Dimensional deviations for untoleranced dimension: Medium class according to IS 2102 ( Part 1 ) : 1980.



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